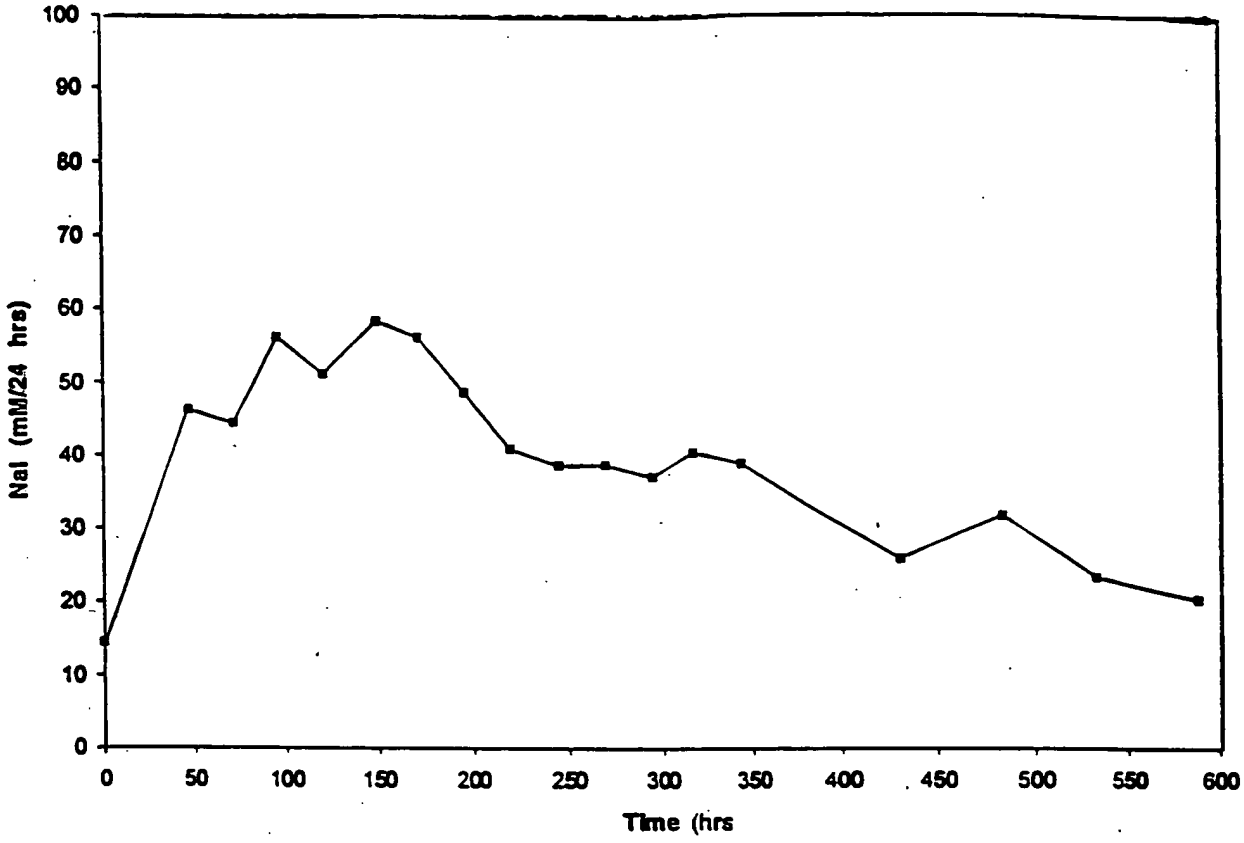

Figure 1. Sustained release of NaI from silicone fabricated device submerged and continuously washed in 10 mM sodium phosphate, 150 mM NaCl, pH 5.6 (see Example 1).

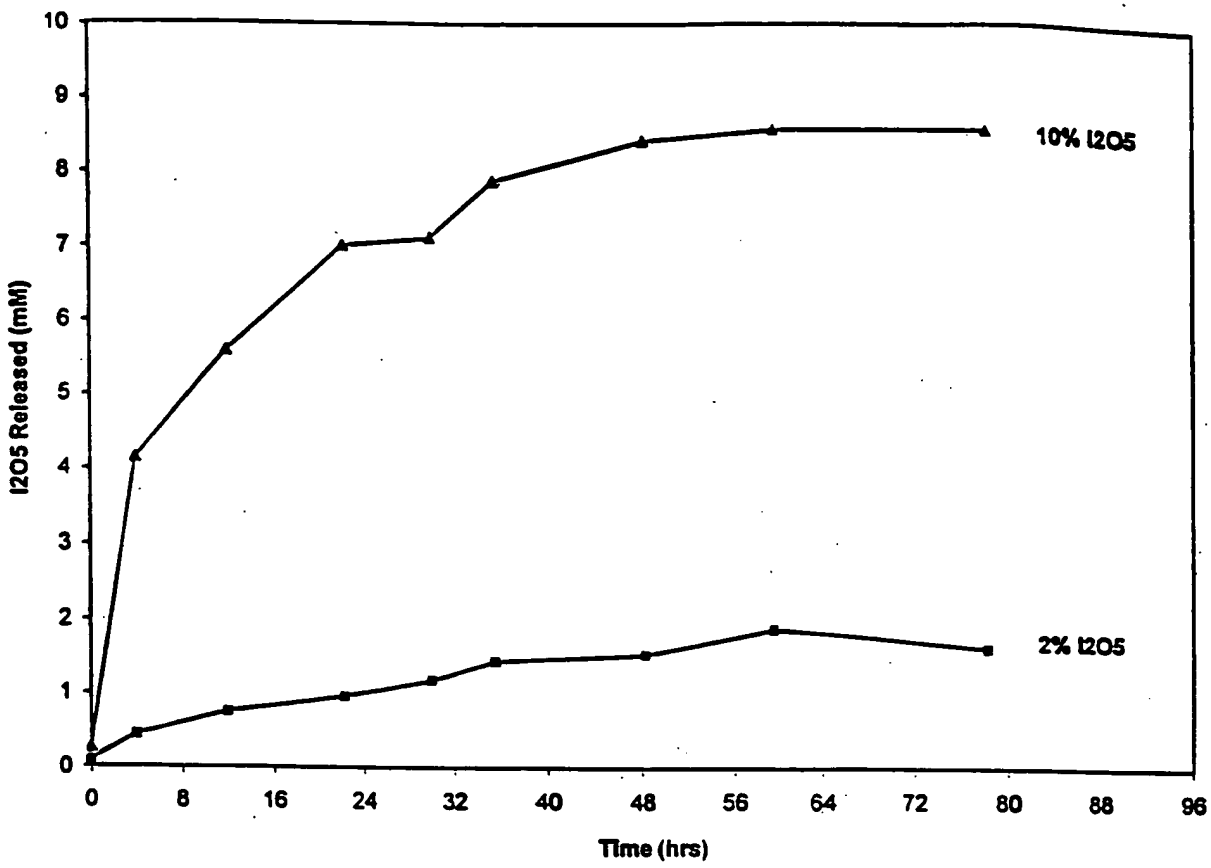

Figure 2. Kinetic release of encapsulated I_2O_5 from silicone fabricated device at various intervals after submersion in 100 mM sodium citrate, pH 4.0, at 2% and 10% I_2O_5 formulations by mass (see Example 3).

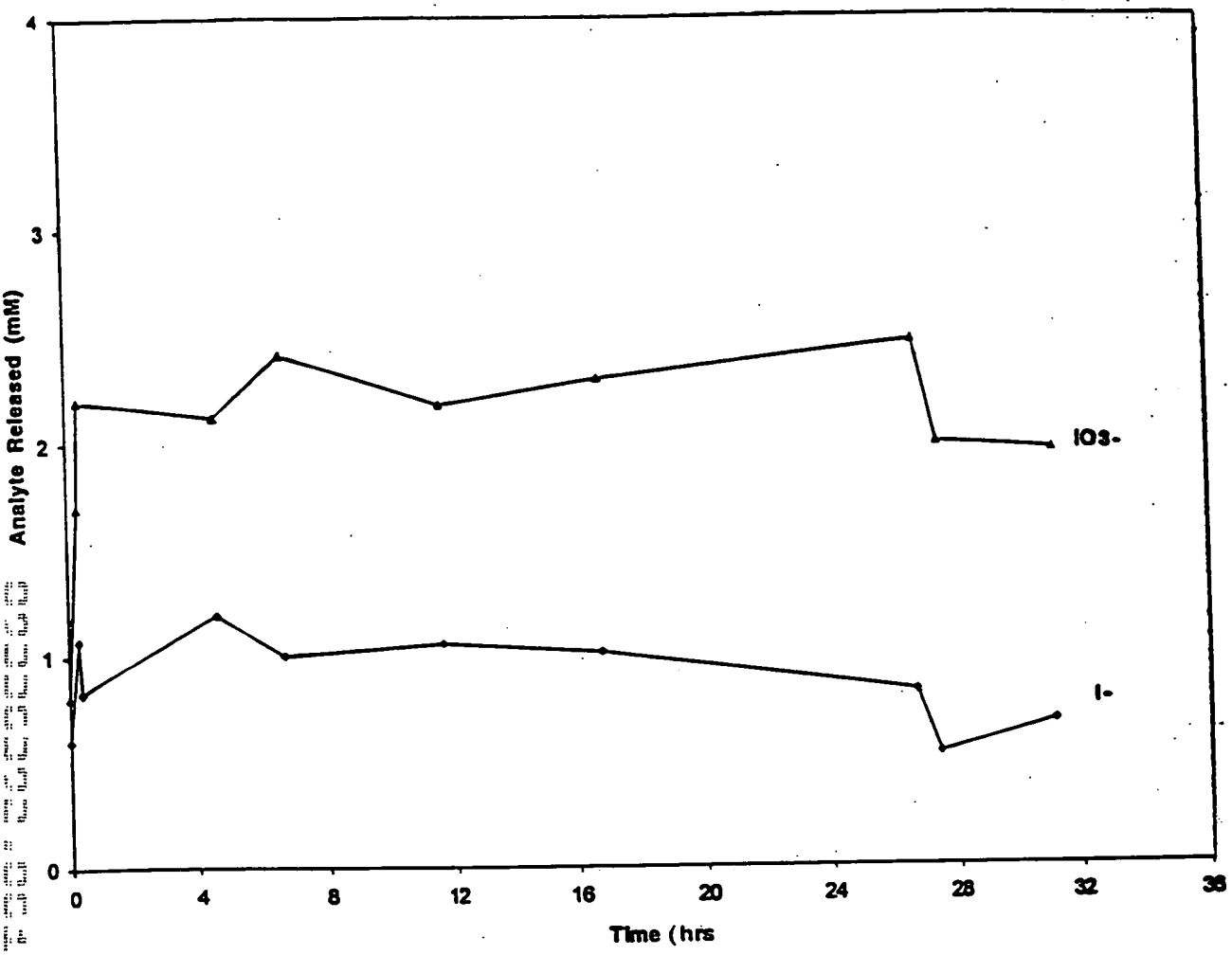

Figure 3. Recovery of I- and IO_3- at varying intervals following submersion of silicone fabricated device in 100 mM sodium citrate, pH 4.0, in a formulation consisting of 2% I-, 8% IO_3- and 10% PVP by mass relative to silicone elastomer (see Example 4).

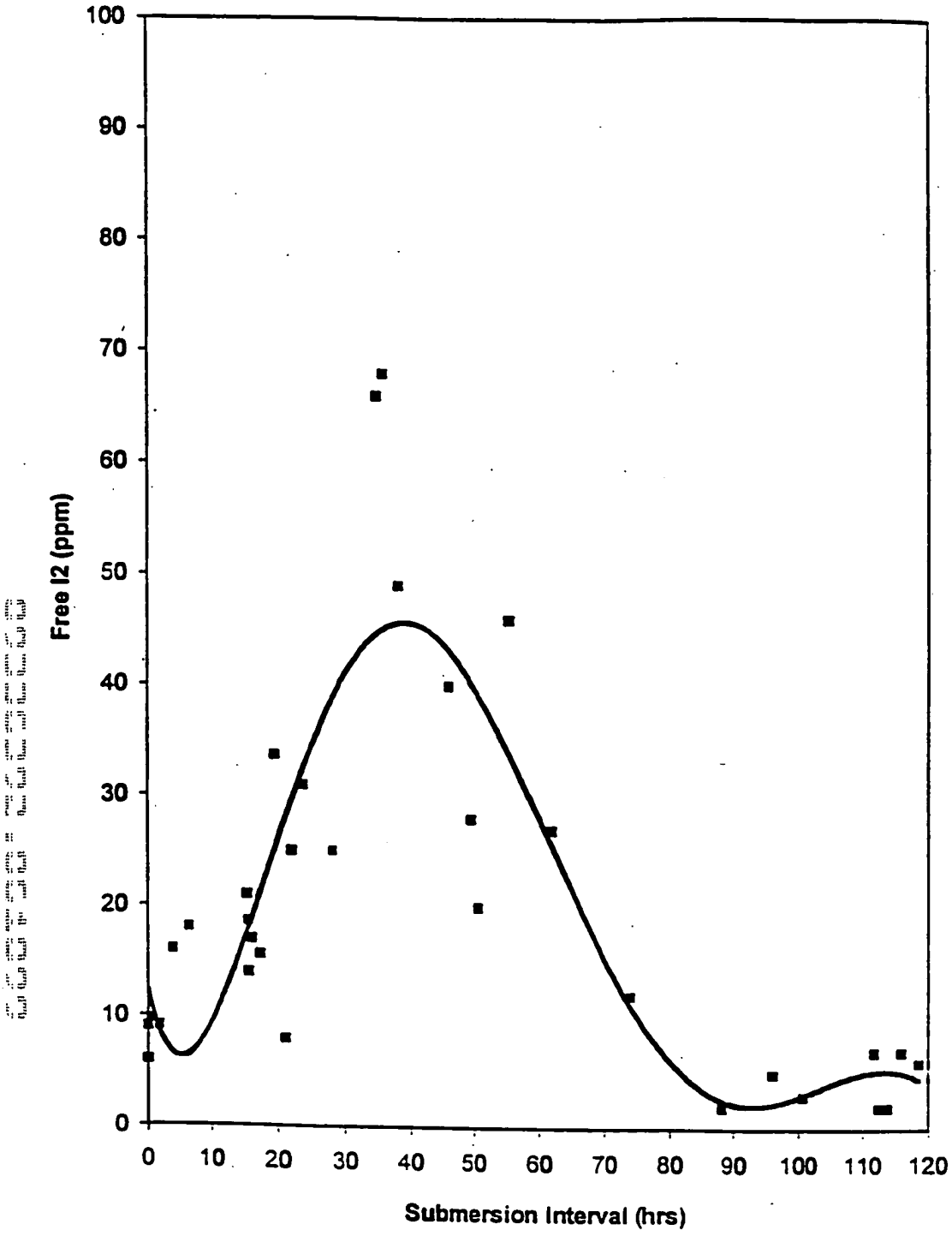

Figure 4. Recovery of free I_2 at varying intervals following submersion of silicone fabricated device in 100 mM sodium citrate, pH 4.0, in a formulation consisting of 2% I-, 8% IO_3- and 10% PVP by mass relative to silicone elastomer (see Example 4).

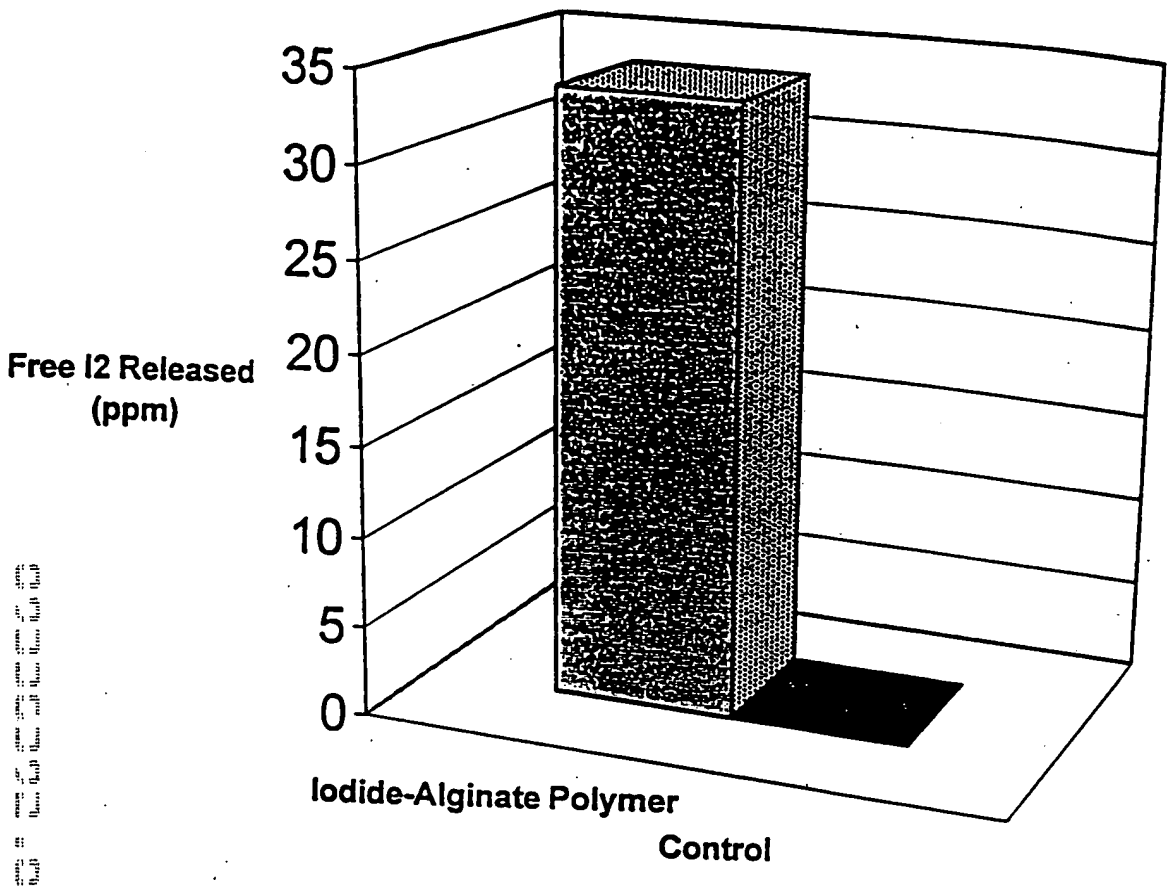

Figure 5. De novo formation of free I_2 released from I^-/IO_3^- encapsulated 1% "high viscosity" alginate hydrogel upon submersion of fabricated device in 100 mM sodium citrate, pH 4.0. Control used same hydrogel composition excluding I^-/IO_3^- from formulation (see Example 5).

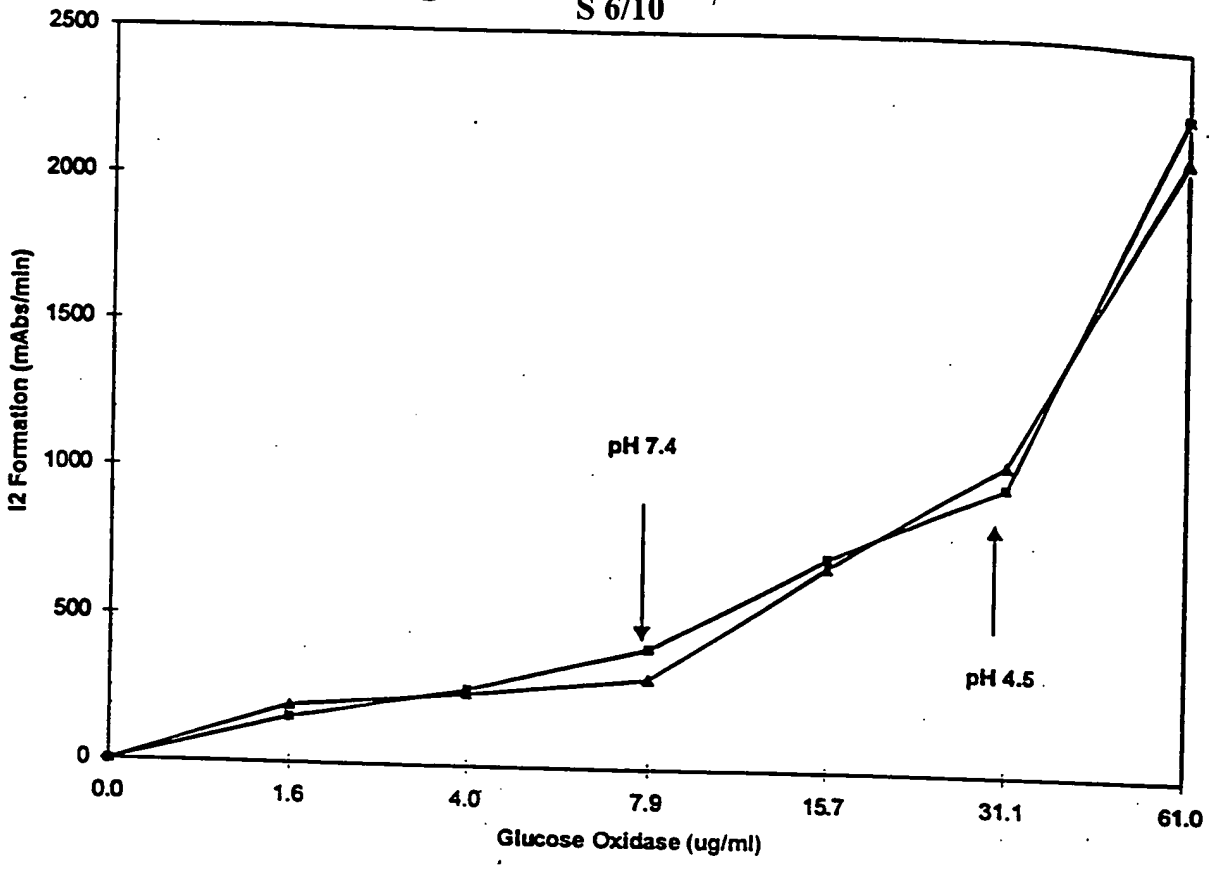

Figure 6. Comparison of kinetic rates of free I_2 generation at pH 4.5 versus pH 7.4 using proton driven reaction through production of gluconic acid via GO and HPO oxidative activity on inorganic I- and glucose (see Example 6).

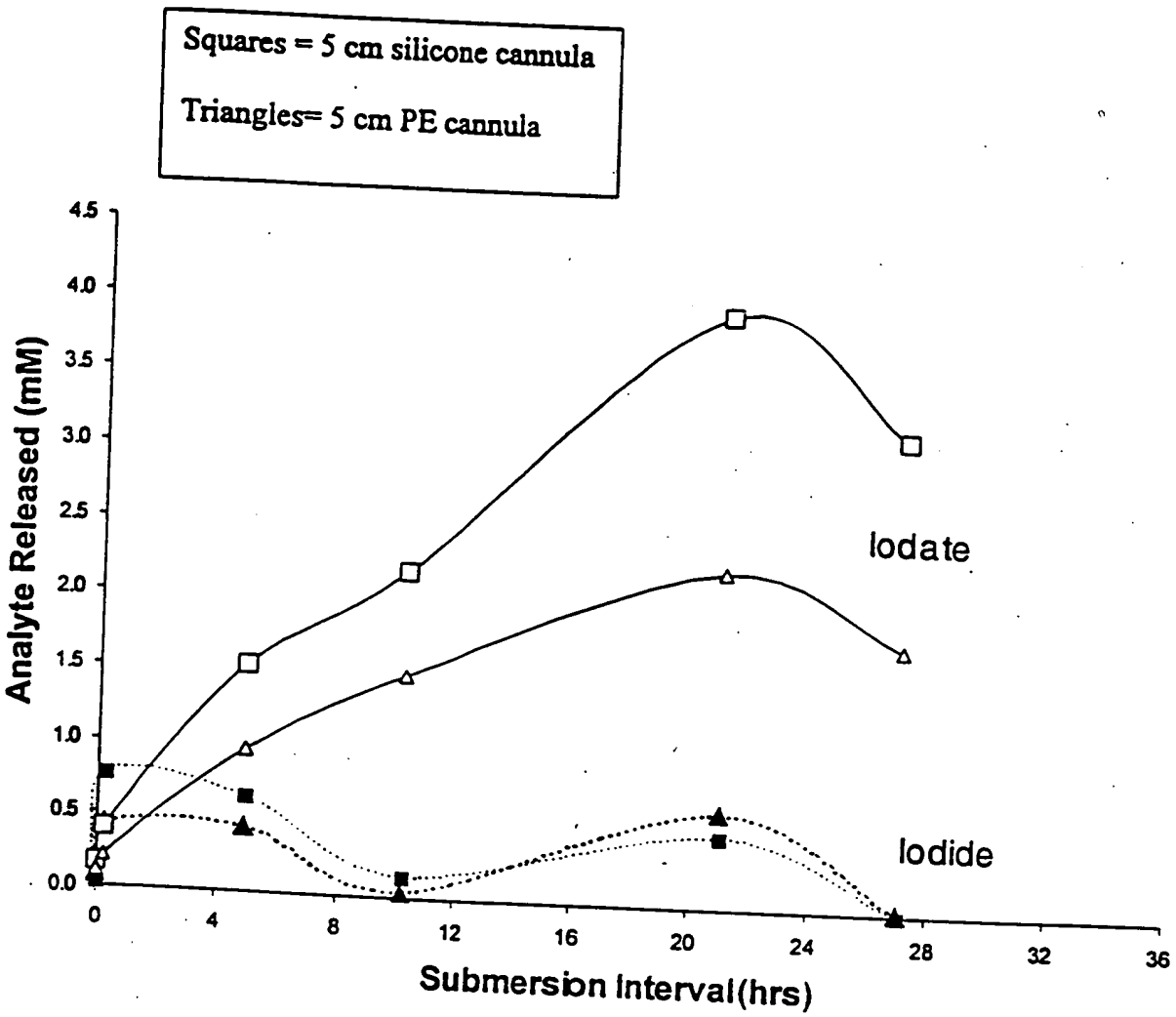

Figure 7. Recovery of IO_3- (solid lines) and I- (dashed lines)at varying intervals following submersion of 5 cm length prefarbricated silicone (square symbols) and polyethylene (triangle symbols) cannulae in 100 mM sodium citrate, pH 4.0, after coating each in thin layers of I-/IO_3- encapsulated silicone polymers (see Example 7).

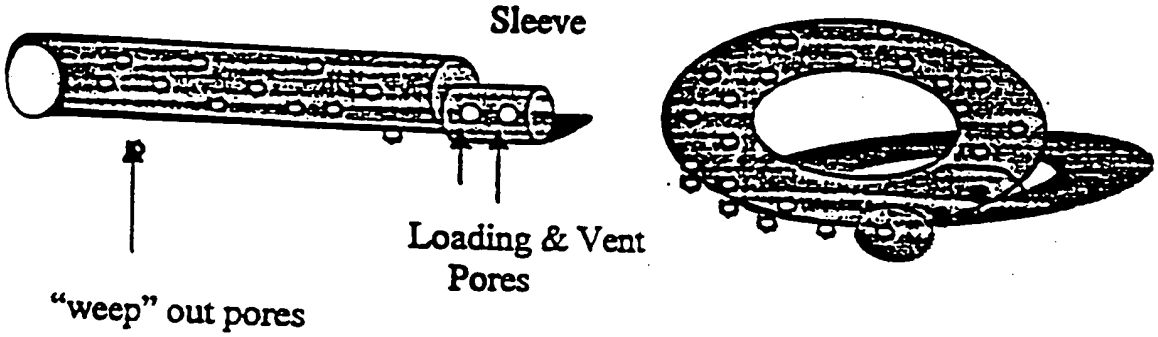

Figure 8

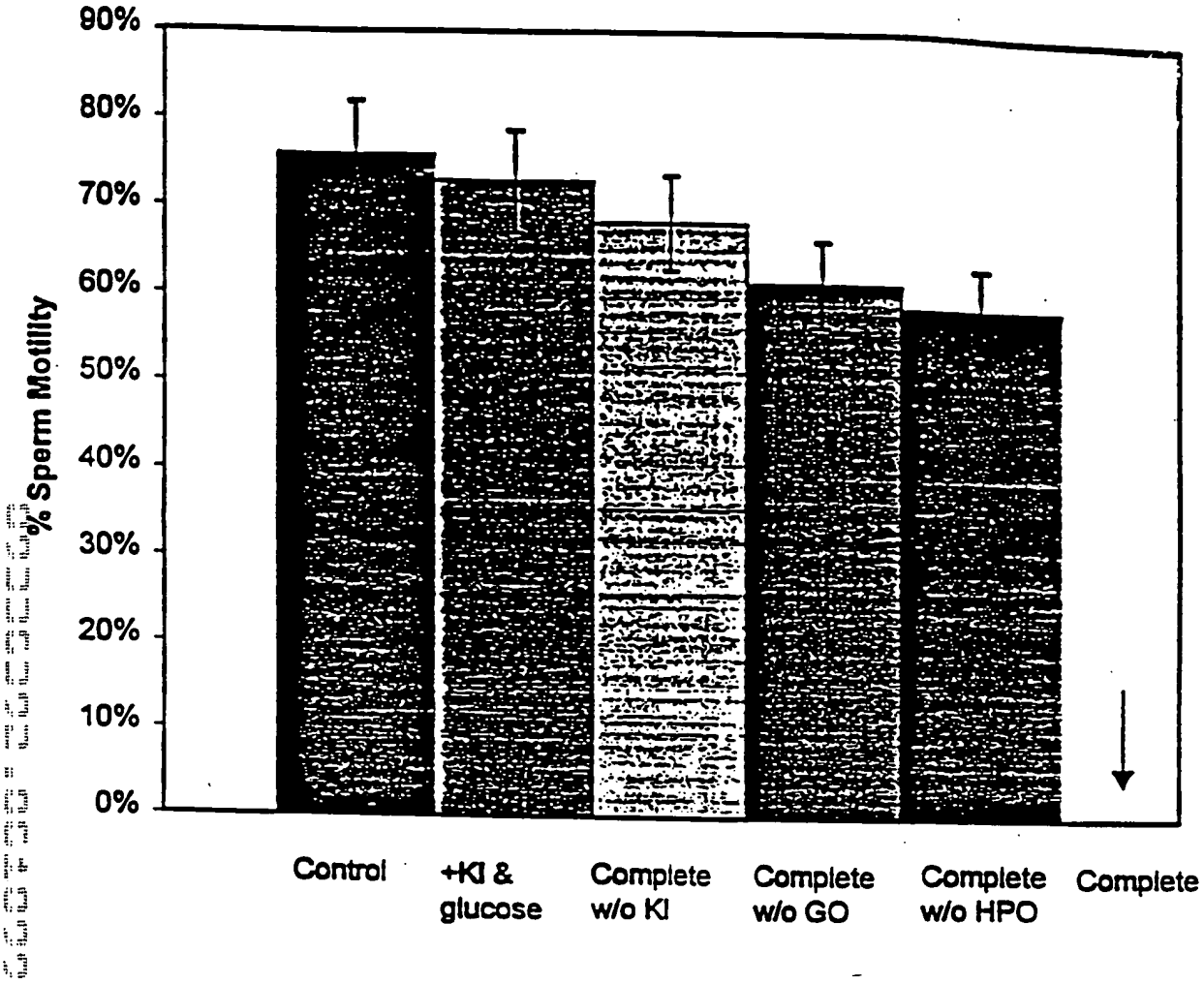
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
% Sperm Motility
Control
+KI & glucose
Complete w/o KI
Complete w/o GO
Complete w/o HPO
Complete

Figure 9

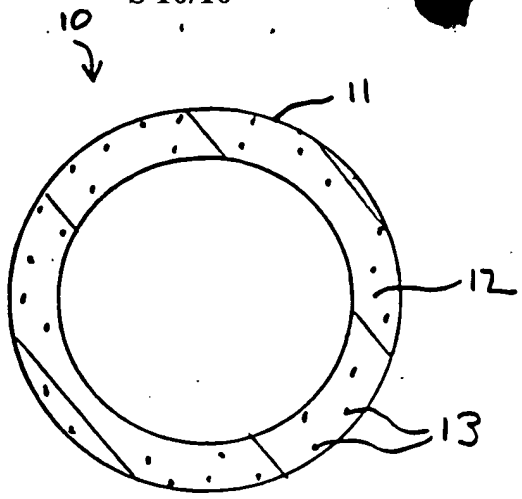

Figure 10

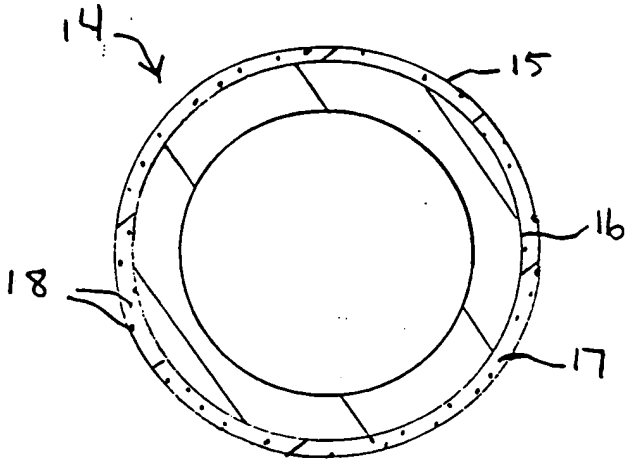

Figure 11

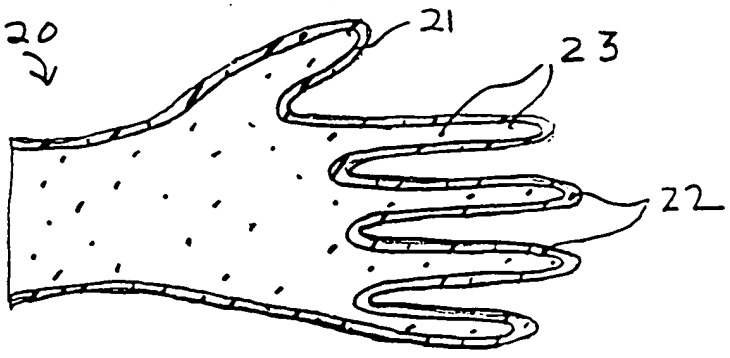

Figure 12